


Engineer: Jack Curtis	Date: 4/22/04	 JPS Communications 5800 Departure Drive, Raleigh, NC 27616			
Drawn: Jack Curtis	Date: 4/22/04				
Approved: CTS	Date: 4/22/04	Title: ACU RADIO APPLICATION NOTES			
Issued/ Revised	Date: 4/22/04	Size: A	Dwg. #: 5961-271236-APP	Rev: A	Sheet: 1 Of 1

APPLIES TO: Vertex VX-4000 Mobile Radio
Vertex VX-6000 Mobile Radio

RADIO MODIFICATIONS: None required.

RADIO PROGRAMMING:

1. Mobile radios should normally be programmed for low transmit power.

RADIO CONTROLS:

1. Adjust the Volume Control until the yellow “SIGNAL” indicator on the associated DSP Module flashes with receive audio.

CABLING:

Standard ACU-1000 and ACU-T Interface cables are made up of a 2 foot TRP Radio Tray Interface cable and the appropriate 13-foot Extension cable.

ACU-1000 Interface Cable	JPS P/N 5961-291236	(5961-271236 + 5961-261002-00)
ACU-T Interface Cable	JPS P/N 5961-281236	(5961-271236 + 5961-281013-00)
TRP-1000 Shelf Interface Cable	JPS P/N 5961-271236	
Radio RF Connector Type		

DSP PROGRAMMING: (See Notes)

RX Level	3*	0dBm*
TX Level	6*	0dBm*
Squelch Type	VOX*	
COR Polarity	Active Low*	
High Frequency Equalizer	4*	Flat*
RX Audio Delay	2*	100 ms*
TX Audio Delay (Radio Type)	0*	No Delay*
Noise Reduction Value	0*	Off*
VOX/VMR Threshold	1*	Med1*
VOX/VMR Hang Time	3*	775 ms*
COR Inhibit After PTT	1*	100 ms*
All Others	As needed	

(* Indicates Default Value)

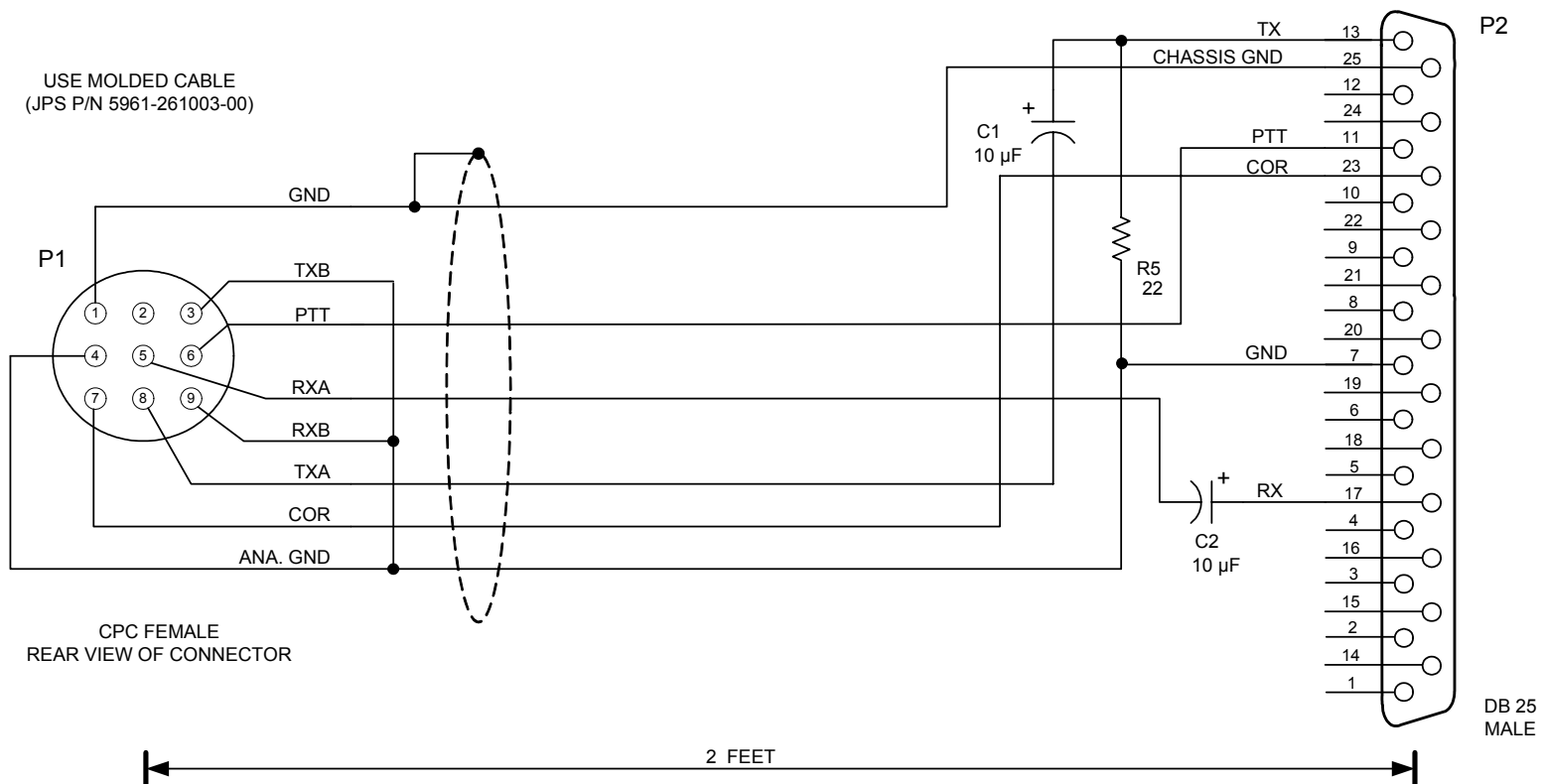
NOTES:

Raytheon JPS Communications has not developed specific settings for this model of radio. Use the generic DSP Setup Procedure to optimize the default values.

PURCHASED PART

Rev	ECO	Date
A		

USE MOLDED CABLE
(JPS P/N 5961-261003-00)



COMPONENT PCB
(JPS P/N 5961-271000)

C1 JPS P/N 0320-100500
C2 JPS P/N 0320-100500
R5 JPS P/N 1820-220000
JU2
JU5
JU6

USED WITH:
VERTEX VX-4000 MOBILE
VERTEX VX-6000 MOBILE

NOTES: SHIELD DRAIN CONNECTED TO PIN 1 OF P1 ONLY.

Designed By:	CTS	Raytheon JPS Communications Raleigh, NC USA		
Drawn By:	EDV	Title CABLE, CPC TO VERTEX VX-4000 MOBILE		
Checked By:	JAC	Size A	Document Number 5961-271236	Rev A
		Issued Date	NOVEMBER 5, 2003	Sheet 1 of 1

PURCHASED PART

Rev	ECO	Date
A		



- NOTES: 1) USE BELDEN 9934 SHIELDED CABLE.
2) CONNECT SHIELD DRAIN TO SHELL OF P1 ONLY.
3) CONNECTORS P1 AND P2 MUST BE MOLDED TO THE CABLE.
4) CABLE MUST BE LABELED WITH THE RAYTHEON/JPS P/N AND REV, VENDOR CODE AND DATE (MM/YY).

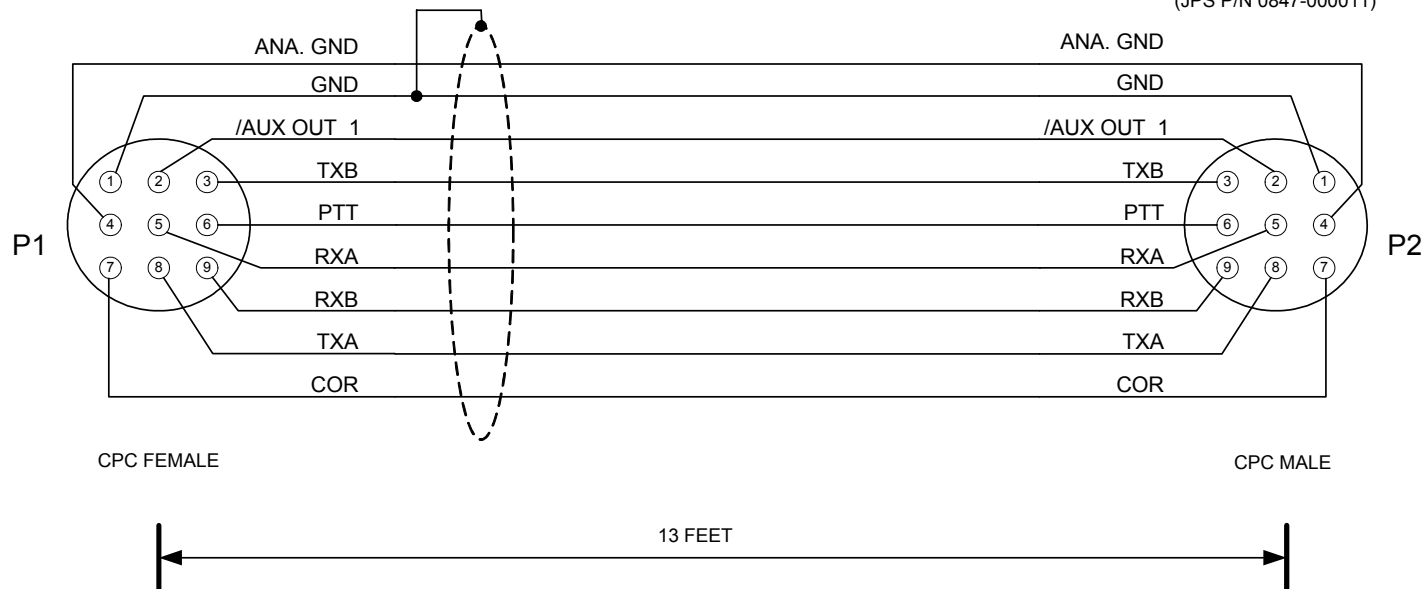
Designed By: JAC	Raytheon JPS Communications		
Drawn By: JAC	Title CABLE, ACU-1000 RADIO EXTENSION - 13 FT		
Checked By: RBP	Size A	Document Number 5961-261002-00	Rev A
Issued Date JANUARY 5, 2004		Sheet <u>1</u> of <u>1</u>	

Rev	ECO	Date
A		

PURCHASED PART

CONNECTOR AMP P/N 206708-1
(JPS P/N 0362-005003)
FEMALE PIN AMP P/N 1-66105-8
(JPS P/N 0362-005002)

CONNECTOR AMP P/N 206705-4
(JPS P/N 0362-009001)
MALE PIN AMP P/N 1-66103-7
(JPS P/N 0847-000011)



- NOTES: 1) USE BELDEN 9934 SHIELDED CABLE.
2) CONNECT SHIELD DRAIN TO PIN 1 OF P1 ONLY.
3) CONNECTORS P1 AND P2 MUST BE MOLDED TO THE CABLE.
4) CABLE MUST BE LABELED WITH THE RAYTHEON/JPS P/N AND REV, VENDOR CODE AND DATE (MM/YY).

Designed By: JAC	Raytheon JPS Communications Raleigh, NC USA		
Drawn By: JAC	Title CABLE, ACU-T RADIO EXTENSION - 13 FT		
Checked By: RBP	Size A	Document Number 5961-281013-00	Rev A
Issued Date JANUARY 5, 2004		Sheet <u>1</u> of <u>1</u>	